1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name
TE Buffer

Other means of identification

Catalog Number
07563

Document Number
DX22381

Synonyms
None

Recommended use of the chemical and restrictions on use

Recommended Use
Laboratory reagent

Details of the supplier of the safety data sheet

Manufacturer/Supplier
STEMCELL Technologies Canada Inc.
Suite 500 - 1618 Station Street
Vancouver, British Columbia V6A 1B6 Canada

Emergency telephone number

Emergency Telephone
1-800-667-0322

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)
The product contains no substances which at their given concentration, are considered to be hazardous to health.

| Appearance | Clear | Physical state | Liquid | Odor | No information available |

Other Information
Not applicable

Unknown acute toxicity
1E-05 % of the mixture consists of ingredient(s) of unknown toxicity
1E-05 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
1E-05 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance
Not applicable.

Mixture
Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Inhalation
Remove to fresh air.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water.

Ingestion
Clean mouth with water and drink afterwards plenty of water.
Most important symptoms and effects, both acute and delayed

Symptoms
No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Explosion data
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

Special protective equipment for fire-fighters
Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Ensure adequate ventilation.

Environmental precautions

Environmental precautions
See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Pick up and transfer to properly labeled containers.

Prevention of secondary hazards
Clean contaminated objects and areas thoroughly observing environmental regulations.
7. HANDLING AND STORAGE

Precautions for safe handling
Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities
Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls
Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment
Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.
Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties
Physical state Liquid
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Appearance: Clear
Color: No information available
Odor: No information available
Odor threshold: No information available

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
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<td>None known</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td>None known</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
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<td>None known</td>
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<tr>
<td>Upper flammability limit:</td>
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</tr>
<tr>
<td>Lower flammability limit:</td>
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<td>None known</td>
</tr>
<tr>
<td>Vapor pressure</td>
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</tr>
<tr>
<td>Vapor density</td>
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<td>None known</td>
</tr>
<tr>
<td>Relative density</td>
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<td>None known</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
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<td>None known</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
<td>None known</td>
</tr>
</tbody>
</table>

Other Information
Softening point: No information available
Molecular weight: No information available
Molecular formula: No information available
VOC Content (%): No information available
Liquid Density: No information available
Bulk density: No information available

10. STABILITY AND REACTIVITY

Reactivity: No information available.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: None under normal processing.
Conditions to avoid: None known based on information supplied.
Incompatible materials: None known based on information supplied.
Hazardous decomposition products: None known based on information supplied.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation
Specific test data for the substance or mixture is not available.

Eye contact
Specific test data for the substance or mixture is not available.

Skin contact
Specific test data for the substance or mixture is not available.

Ingestion
Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms
No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

Unknown acute toxicity
1E-05 % of the mixture consists of ingredient(s) of unknown toxicity
1E-05 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
1E-05 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
1E-05 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
No information available.

Serious eye damage/eye irritation
No information available.

Respiratory or skin sensitization
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Reproductive toxicity
No information available.
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<table>
<thead>
<tr>
<th>STOT - single exposure</th>
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</tr>
</thead>
<tbody>
<tr>
<td>STOT - repeated exposure</td>
<td>No information available.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
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</table>

12. ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Ecotoxicity</th>
<th>.</th>
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<tbody>
<tr>
<td>Persistence and degradability</td>
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<tr>
<td>Bioaccumulation</td>
<td>There is no data for this product.</td>
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<tr>
<td>Other adverse effects</td>
<td>No information available.</td>
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13. DISPOSAL CONSIDERATIONS

<table>
<thead>
<tr>
<th>Waste treatment methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste from residues/unused products</td>
</tr>
<tr>
<td>Contaminated packaging</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>DOT</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG</td>
<td>Not regulated</td>
</tr>
<tr>
<td>MEX</td>
<td>Not regulated</td>
</tr>
<tr>
<td>ICAO (air)</td>
<td>Not regulated</td>
</tr>
<tr>
<td>IATA</td>
<td>Not regulated</td>
</tr>
<tr>
<td>IMDG</td>
<td>Not regulated</td>
</tr>
</tbody>
</table>
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RID  Not regulated
ADR  Not regulated
ADN  Not regulated

15. REGULATORY INFORMATION

International Inventories
TSCA  Complies
DSL/NDSL  Complies
EINECS/ELINCS  Complies
ENCS  Does not comply
IECSC  Complies
KECL  Complies
PICCS  Complies
AICS  Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard  No
Chronic Health Hazard  No
Fire hazard  No
Sudden release of pressure hazard  No
Reactive Hazard  No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and
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Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water 7732-18-5</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>Ethylenediaminetetraacetic acid (EDTA)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Prepared By, Quality Control. STEMCELL Technologies Canada Inc.

Revision Date 21-Mar-2018

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product.

End of Safety Data Sheet